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Remarks

Applicants gratefully acknowledge the reconsideration given this application and the withdrawal of the final rejections made in the Office Action of January 26, 2005.

Entry of the above-noted amendments, reconsideration of the application, and allowance of all claims pending are respectfully requested. These amendments to the claims constitute a bona fide attempt by applicants to advance prosecution of the application and obtain allowance of certain claims, and are in no way meant to acquiesce to the substance of the rejections. Claims 1-3, 5-12 and 15-43 remain pending.

Claim Rejections - Double Patenting

In the Office Action, claims 1-3, 5-8, 25-27, 36, 37 and 42 were provisionally rejected under the doctrine of obviousness-type double patenting with regard to claims 1-18 of co-pending application number 09/932,706 (Byers et al.). It is believed that this rejection is rendered moot and should be withdrawn in view of the amendments to the claims of this application. That is, it is believed that the currently pending claims are patently distinct from the claims of the co-pending application, and hence the provisional rejection based on obviousness-type double patenting of the subject application should be withdrawn.

Claim Rejections - 35 U.S.C. §103

MPEP §706.02(j) states: "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."
Emphasis added.

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The Examiner rejected claim 1 under 35 U.S.C. 103 as being obvious based on Heflinger (U.S. Patent No. 5,726,786) in view of Staiger (U.S. Patent No. 6,628,441) and further view of Kim (U.S. Patent No. 6,661,940). Applicants respectfully submit that the applied references, with or without modification or combination, assuming, *arguendo*, that the modification or combination of the applied references is proper, does not teach or suggest at least one element of the claimed invention, as further discussed below. Applicant respectfully traverses the rejections and seeks withdrawal of the rejections resulting in allowance of the application.

In the Office Action only Kim of the three applied references is relied on as allegedly teaching receivers oriented to receive portions of a free space beam line parallel to the axis (FIG. 4, column 11, lines 10-21). FIG. 4 of Kim is a schematic diagram showing an optical backplane assembly including optical components 284a-284f. As seen in the figure, the receivers 202 have corresponding waveguiding plates 232 that serve to reflect and/or refract the optical beam in order for the beam to be transmitted to each of the receivers. For example, the beam received by receiver 202b has been redirected by waveguide 232c and the beam received by receiver 202a has been redirected by waveguide 232c. The beam utilized in Kim is not a single, line-of-sight optical beam as required by claim 1. Thus, claim 1 is not rendered obvious in view of the applied references.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)

The teachings of Heflinger as modified by Kim are relied upon to satisfy the requirements of claim 1 regarding the configuration and utilization of the optical beam line. Heflinger discloses an integrating chamber that has an internal surface designed to reflect optical beams transmitted from the various optical ports located about the chamber. An important principle of operation in Heflinger is the utilization of the reflection of the optical beams off the interior surface of the chamber in order for the various receivers to be able to receive them. Kim is relied upon as allegedly teaching receivers oriented to receive respective portions of the free space beam line parallel to the axis. The proposed modification of Heflinger by including parallel disposed

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receivers as per Kim would substantially change the principle of operation of Heflinger. Because the proposed modification would substantially change the principle of operation of Heflinger if modified by Kim, the teachings of the references are not sufficient to render claim 1 as prima facie obvious. Therefore, the withdrawal of the rejection of claim 1 is respectfully sought.

Claim 2 is amended to define that the single, line-of-sight free space beam line is transmitted through the conduit so that it strikes each of the receivers without having its course of direction changed. None of the applied references provide such a teaching. Therefore, the combination of the references does not render the subject matter of claim 2 obvious.

Claim 42, which depends on claim 1, further defines the beam line as striking each of the receivers without the beam line being reflected or refracted after its originating transmission. None of the applied references provide such a teaching, and hence the combination of references cannot render the subject matter of claim 42 obvious.

Independent method claim 36 is believed to be allowable for similar reasons explained above with regard to claim 1. Dependent method claims 41 and 43 are likewise believed to be allowable for reasons explained above with regard to claims 2 and 42, respectively.

The remainder of the dependent claims provide additional limitations that provide patentable distinctiveness when considered in combination with the limitations of the parent claims.

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In view of the above amendments and remarks, allowance of all claims pending is respectfully requested. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicants' attorney.

Respectfully submitted,



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